



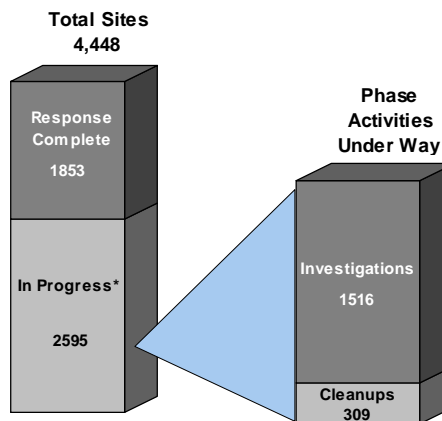
NAVY

CLEANUP STATUS AND PROGRESS

"OPEN AND COOPERATIVE DECISION-MAKING WITH REGULATORS AND COMMUNITIES IS AN IMPORTANT TOOL FOR SUCCESS IN OUR ENVIRONMENTAL PROGRAMS. SUCCESSFUL PARTNERING EFFORTS MAKE BETTER USE OF CLEANUP MONEY BY PROMOTING COMMUNICATION AND TEAMWORK AMONG DIVERSE INTERESTS, REDUCING THE TIME BETWEEN STUDY AND ACTUAL CLEANUP OF CONTAMINATION, AND SUSTAINING PERFORMANCE OF THE OVERALL CLEANUP EFFORT."

— ROBERT B. PIRIE, JR., ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND ENVIRONMENT)

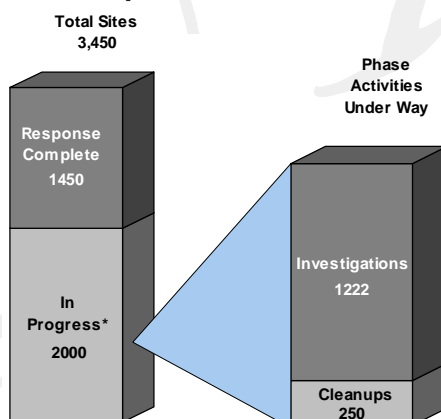
ER, Navy and BRAC Status as of September 30, 1997



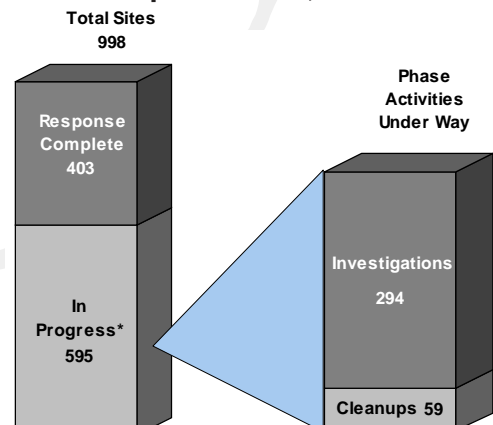
The Department of the Navy (DON) continues to make substantial progress toward completion of its Environmental Restoration Program in the face of unusual and complex challenges. Some of those challenges are directly associated with DON's mission and related operational factors. Most Navy and Marine Corps installations are located in coastal areas, which generally have environmentally sensitive habitats and populous surrounding communities. The heavily industrialized operations that typically exist at naval installations to support ships and aircraft add to the complexity of cleanup. Installations slated for closure or realignment also have a significant impact on the program, particularly in the areas of land reuse and fast-track cleanup.

To date, the Navy has identified 4,448 potentially contaminated sites at 240 installations. Of these sites, 1,853 require no further action. Restoration activities are planned or under way at 2,595 sites. The Navy has completed

ER, Navy Site Status as of September 30, 1997

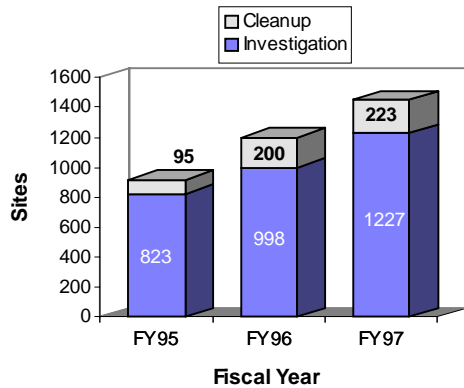


BRAC Site Status as of September 30, 1997

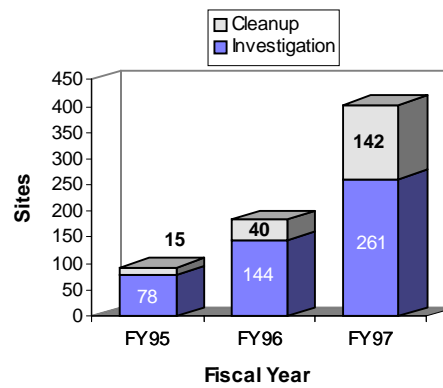


* NOTE: IN-PROGRESS INCLUDES SITES THAT WILL BE UNDER WAY IN THE FUTURE. THEREFORE, TOTALS OF SITES WITH PHASE ACTIVITIES UNDER WAY ARE GENERALLY LESS THAN THE TOTAL NUMBER OF SITES IN PROGRESS.

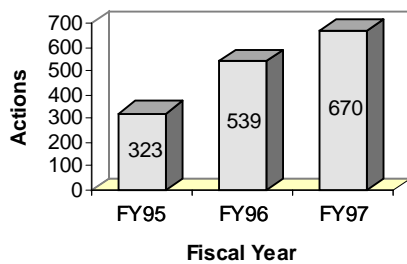
Operational-Installation Sites with Response Complete



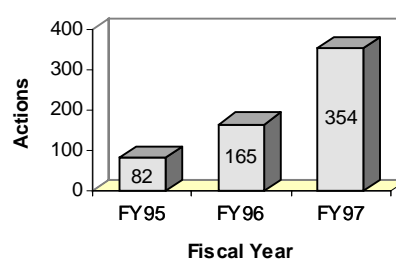
BRAC Sites with Response Complete



Cumulative Interim Actions Completed at Operational-Installation Sites



Cumulative Interim Actions Completed at BRAC Sites

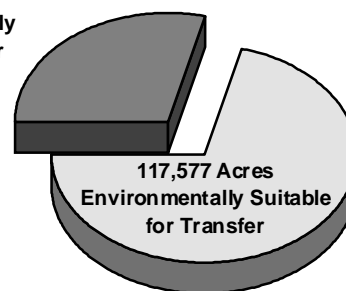


final Remedial Actions at 420 sites. Ninety-four of these sites require Remedial Action Operations. Interim Actions have been completed at 787 sites. Cleanup at Navy's 3,450 operational-installation sites is now funded by the Navy's Environmental Restoration Account (ER, Navy). Devolvement of the central Defense Environmental Restoration Account (DERA) to the services is discussed briefly in the next section.

The Base Realignment and Closure (BRAC) 1988, 1991, 1993, and 1995 lists included 53 Navy installations (including all BRAC-funded Navy installations). Navy installations have formed 40 BRAC cleanup teams to support

Environmental Condition of BRAC Property

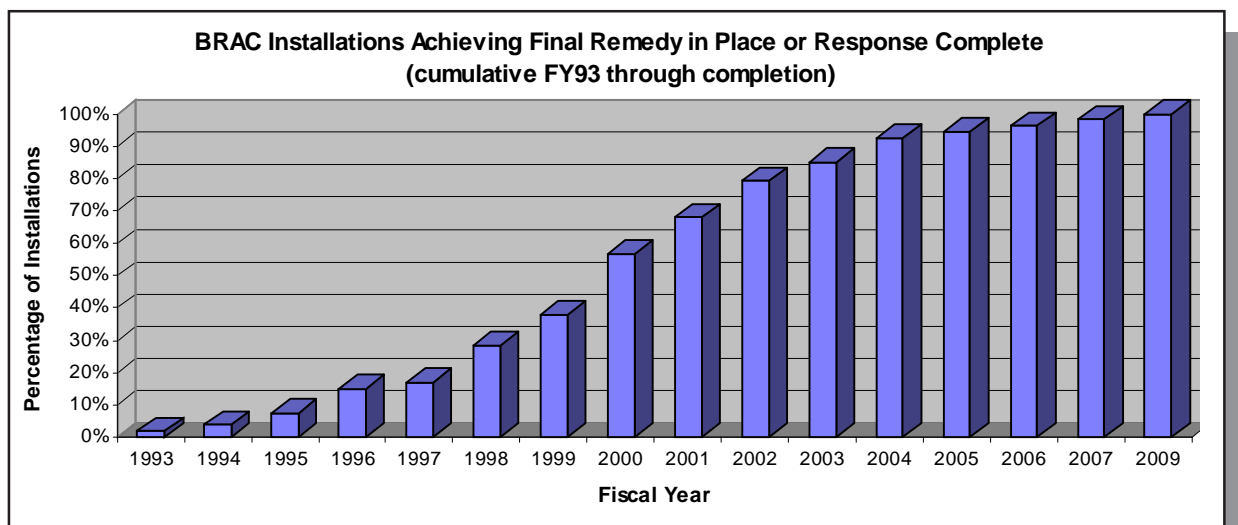
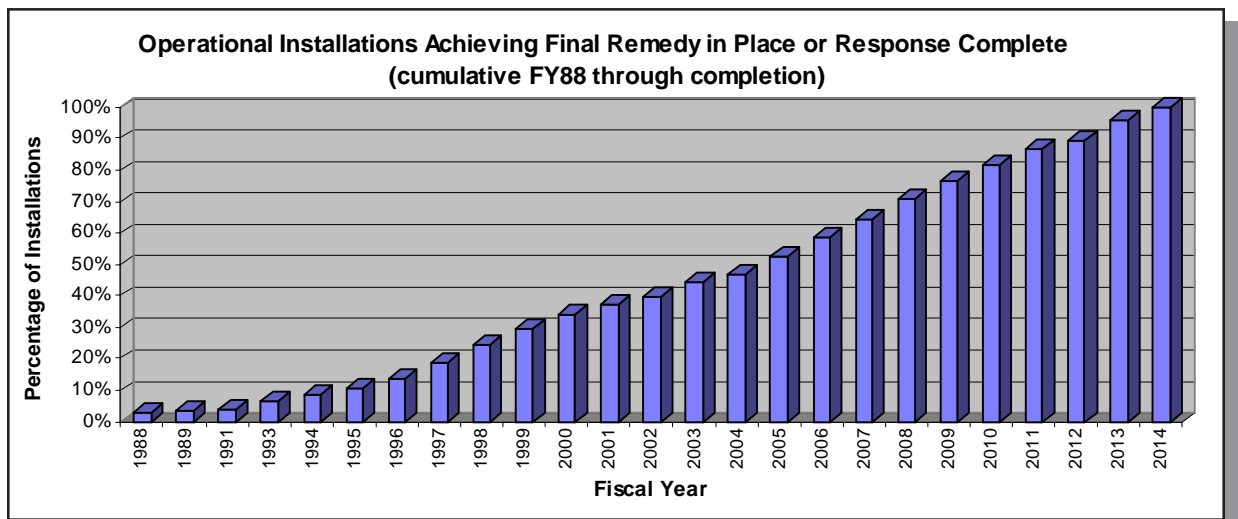
**47,498 Acres
Environmentally
Unsuitable for
Transfer**



cleanup. Local Redevelopment Authorities have completed reuse plans at 42 Navy BRAC installations. Reuse plans have been initiated at six additional installations. Environmental Baseline Surveys as well as BRAC Cleanup Plans have been completed for all BRAC fast-track installations. Approximately 165,000 acres are excess to the Navy. Excess property is available at 54 installations. At the end of fiscal year 1997 (FY97), 71 percent of the property at the Navy's BRAC fast-track installations had been determined to be environmentally suitable for transfer.

GOALS AND PRIORITIES

DERA was devolved to the services in FY97. The Navy is taking advantage of the benefits that devolvement provides by improving planning and budgeting and increasing accountability. DON's program goals and priorities are based principally on a risk management or risk-plus approach, which considers the Relative Risk Site Evaluation framework along with other risk management factors, such as reuse (for BRAC properties), legal requirements, economic considerations,



and stakeholder concerns. For completion of its Environmental Restoration Program, DON endorses a stable-funding approach that is consistent with achieving the restoration goals outlined in the Defense Planning Guidance. DON refined its cost-to-complete estimate in FY97. At operational and closing installations, the cost to complete the Environmental Restoration Program for the Navy and the Marine Corps is now estimated at approximately \$4.84 billion (this estimate does not include program management costs). This amount, plus the \$0.87 billion spent in FY96 and FY97, is \$1.92 billion less than the \$7.63 billion anticipated cost-to-complete projected at the beginning of FY96. This \$1.92 billion in expected cost avoidance is based on the anticipated application of new information and technologies.

DON's goal is to spend at least 70 percent of its total program budget (or about 80 percent of the amount directly chargeable to project work) on high-relative-risk sites. This goal puts the proper emphasis on relative-risk reduction while allowing appropriate flexibility in addressing stakeholder concerns and other risk management considerations. Two additional considerations are the need to clean up sites that are slated for reuse and the need to plan for and take advantage of projects that provide economies of scale. Economies of scale are achieved by addressing similar, proximate sites in a coordinated way. For example, in planning and designing a Remedial Action to clean up a number of sites within the same operable unit (that is, sites that have similar contaminants and conditions and that may be located near one another), it is usually more economical to address all of the sites at the same time, as part of the same project, instead of addressing only high-risk sites initially and then dealing with related low-risk or medium-risk sites individually. In this case, flexibility allows medium- or even low-relative-risk sites to be included in the project along with the high-relative-risk site(s) that are given top budgetary priority. DON also has an initiative under way to accelerate the cleanup or

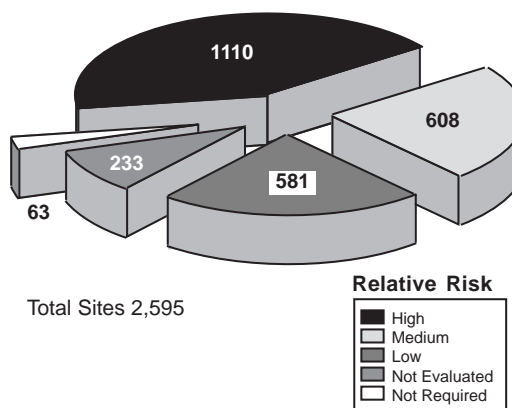
closure of all sites at installations that have only a few, generally less complex sites. This initiative is geared toward closing out the restoration program completely at these installations. By doing this, DON will avoid costs by eliminating the continued overhead associated with maintaining a program at the installations.

DON continues to emphasize accomplishing cleanups, while maintaining the necessary level of investment in site analysis. DON's goal is to spend at least 60 percent of its total program budget (or about 70 percent of the amount directly chargeable to project work) on actual cleanup. This goal was exceeded in FY97, when 62 percent of the total program funding was spent on cleanup. Continued use of Interim Remedial Actions and Removal Actions is helping DON achieve these aggressive cleanup goals.

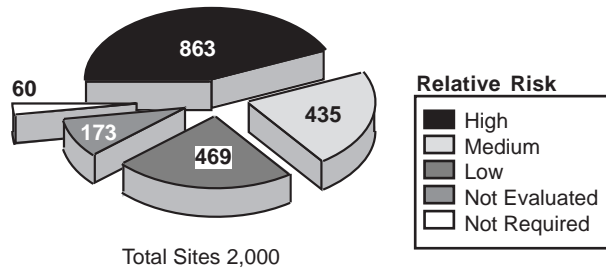
RELATIVE RISK EVALUATION

During FY97, DON reduced the number of sites that had not been evaluated for relative risk from 396 to 233. The remaining unevaluated sites are new sites that will be evaluated in FY98

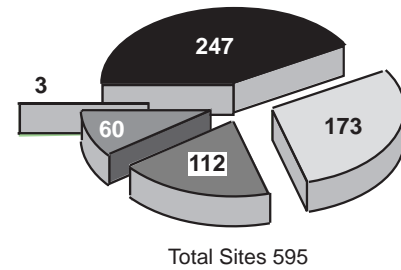
Relative Risk Ranking for ER, Navy and BRAC Sites in Progress



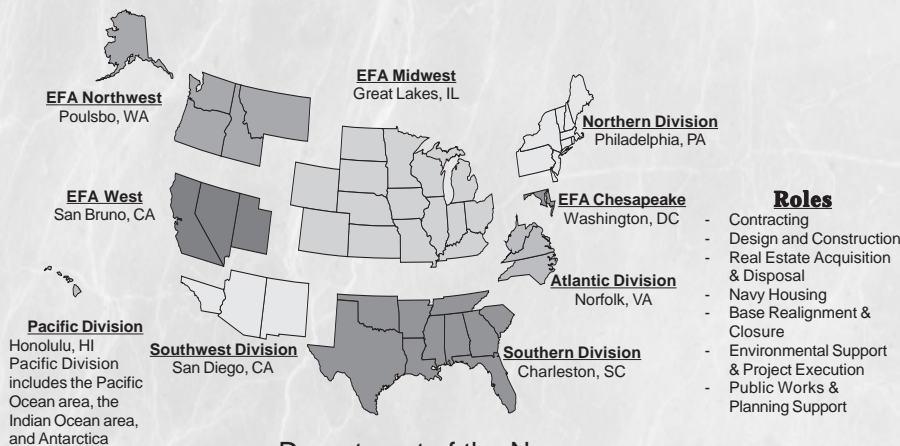
Relative Risk Ranking for ER, Navy Sites in Progress



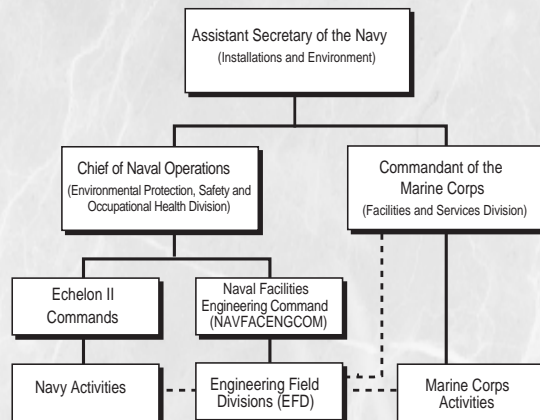
Relative Risk Ranking for BRAC Sites in Progress



ENGINEERING FIELD DIVISIONS AND ACTIVITIES



Department of the Navy



or existing sites that do not require evaluation or cannot be evaluated because of technical considerations in the DoD Relative Risk Site Evaluation model.

ORGANIZATION

DON executes its Environmental Restoration Program through the Naval Facilities Engineering Command and its eight Engineering Field Divisions and Activities (EFD/A) nationwide. Remedial project managers (RPM) are assigned for each installation in each geographic region covered by an EFD/A. The RPMs reside at the EFD/A but work closely with the installations and the regulators to plan, set priorities, establish budgets, and coordinate project execution. Contracting, technical coordination and direction, and execution of the work are

centrally managed by the RPMs and the support staff at the EFD/A. Installations generally take the lead in community relations, outreach, and public involvement and maintain ultimate responsibility for their respective restoration programs.

The regionally centralized approach offered by the EFD/A provides DON with a number of benefits, including consistency, efficiency, and economies of scale. Some of these benefits can be seen in the very successful partnering efforts among EFD/As (representing the installations), U.S. Environmental Protection Agency (EPA) regions, and states. The regional approach allows partnering efforts to be especially well coordinated and efficient and helps maintain program continuity over time. DON is very proud of the leadership role it has taken in developing meaningful and lasting partnerships with regulatory agencies throughout the United States.

Other benefits of the regional approach are consistency in policies and guidance, management and technical approaches, and planning and priority-setting within a given EPA region; enhanced communication and sharing of information and lessons learned among RPMs; and efficiencies and economies of scale in contracting and other resource-support activities.

MANAGEMENT INITIATIVES AND IMPROVEMENTS

The Navy fielded a new data management and information system in FY96 and made a number of improvements during FY97. The system, called NORM, is based on a design that normalizes the various data collected and

reported for the Environmental Restoration Program. NORM has consolidated and improved system requirements and capabilities that previously were contained in multiple stand-alone databases (such as relative risk, cost-to-complete, site information, and budget data). NORM eliminates the duplication of effort that was inherent in the previous systems, providing an integrated data management and collection process that not only serves reporting requirements but also provides an accessible, useful tool for field personnel. NORM was used to develop the FY98 and FY99 DON budgets and has improved the quality and timeliness of data, increasing DON's ability to plan and to allocate resources.

The DON 5-Year Environmental Restoration Plan continues to be an important planning, communication, and management tool. Published annually, the 5-year plan helps DON communicate its successes to installation personnel, regulatory agencies, and the public.



The DON 5-year plan can be accessed through the World Wide Web at <http://5yrplan.nfesc.navy.mil/>

INFORMATION AND TECHNOLOGY TRANSFER

The area of information and technology transfer continues to be one of DON's strengths. The Navy Environmental Leadership Program (NELP), located at Naval Station Mayport, Florida, and Naval Air Station (NAS) North Island, California, is instrumental in developing and demonstrating cost-effective, innovative cleanup technologies that can be

transferred to, and adopted at, other DoD installations. To promote such technological advances, the Naval Facilities Engineering Service Center (NFESC) at Port Hueneme, California, issued a Broad Agency Announcement (BAA) in the *Commerce Business Daily* during FY97, encouraging developers to submit abstracts on their innovative environmental cleanup technologies to the Navy for potential demonstration through NELP. Technologies submitted for review are now being evaluated. The BAA will remain open through FY98.



More information on the NELP initiative can be found on the World Wide Web at <http://www.nasni.navy.mil/~nelp/nelp.htm>

NFESC provides DON with specialized engineering, scientific, and technical products and services and is oriented toward the transfer of technology through consultation and technical assistance, patent license agreements, cooperative research and development agreements, and direct rapid response to requests for support.

In FY96, NFESC led technology application peer reviews, known as the Cleanup Review Tiger Team, at each EFD/A. The review effort included discussions with 150 RPMs who are responsible for approximately 460 sites. The reviews focused on high-cost projects, where use of innovative technologies and approaches is most likely to produce quality improvements. The teams made site-specific findings and recommendations, as well as a number of general recommendations for improving the quality and performance of the DON Environmental Restoration Program. Follow-up Tiger Team reviews were conducted in FY97 for additional high-cost sites. The findings and recommendations of the Tiger Team effort have improved program execution,

reduced remediation costs at numerous sites, and accelerated environmental cleanup efforts.



More information about NFESC can be found on the World Wide Web at <http://www.nfesc.navy.mil/>

In FY96, DON chartered an internal advisory group, the Alternative Restoration Technology Team (ARTT), to promote the use of innovative technologies in order to save time and money. The ARTT, which is chaired by NFESC and composed of various representatives and organizations throughout the DON chain-of-command, is responsible for the following activities:

- ◆ Identifying barriers to implementing innovative technologies
- ◆ Recommending process changes to eliminate or minimize the impact of barriers to implementing technologies
- ◆ Proposing policies and procedures for developing and implementing new technologies
- ◆ Developing and recommending initiatives and strategies that support use of innovative technologies
- ◆ Identifying potential sites and innovative technologies for demonstration projects
- ◆ Establishing and coordinating communication between RPMs from various EFD/As.

These efforts continued in FY97. The ARTT has enhanced the cleanup program by providing DON with a centralized, focused, and efficient approach to information and technology transfer.

OUTREACH

DON has long recognized that stakeholder participation is vital to the success of the Environmental Restoration Program. Restoration advisory boards (RAB) are in operation at more than 100 active and closing Navy and Marine Corps installations. The success and value of the RABs and the continuing formal partnerships with state and federal regulatory agencies cannot be overestimated. In FY97, DON provided more than \$2 million in administrative support to RABs for training, technical information, and other logistical support.

During FY97, the Navy also conducted the first DoD pilot effort for the Technical Assistance for Public Participation (TAPP) program. The pilot effort was conducted at NAS North Island. To meet the community's need for

increased technical knowledge, the NAS North Island team, with specific input from community RAB members, awarded four purchase orders, for a total of \$22,423, to provide the requested TAPP services. The NAS North Island TAPP pilot is being used as a model by DoD for the further development of the program and as a training tool.

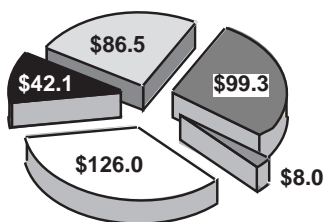
FUNDING

In FY97, the Navy obligated \$287.1 million in Environmental Restoration funds to active installations. Funding levels will decline slightly, to \$275.5 million, in FY98. With adjustments for inflation, the FY99 funding level is projected to be \$281.6 million.

In FY97, approximately 62 percent of Navy Environmental Restoration funds was spent on

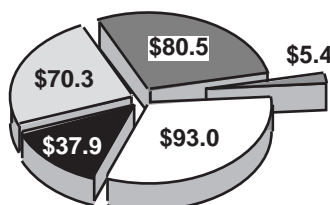
**Navy Environmental Restoration Funding Profile
(in millions of dollars)**

FY96 DERA Funds Executed

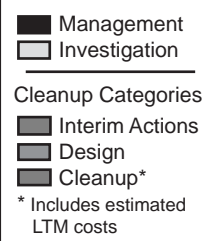


Total = \$361.9 million

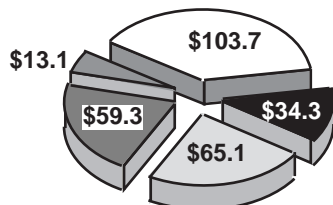
FY97 ER, Navy Funds Obligated



Total = \$287.1 million

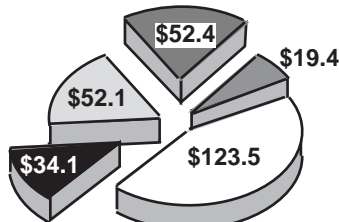


FY98 ER, Navy Execution Planned



Total = \$275.5 million

FY99 ER, Navy Planning Estimate



Total = \$281.6 million

design work, interim or final cleanup actions, and operation and maintenance. By FY99, the proportion of program funds expended on cleanup activities is expected to increase to 69 percent.

Through FY97, the DON cleanup program had identified 3,450 potentially contaminated sites at operational Navy and Marine Corps installations. Through cleanup actions, or by verifying that no cleanup action is required, DON brought 1,450 of these sites to Response Complete status. Analysis or cleanup actions are in progress at the 2,000 remaining sites. Forty-three percent, or 863, of these sites are categorized as high relative risk.

In FY97, the Navy completed 131 Interim Actions at operational installations, bringing the total number of Interim Actions completed at active installations to 670 at 529 sites. During FY97, the number of active-installation sites that were brought to Response Complete status through cleanup activities increased by 23 over FY96. The number of no-further-action or

Response Complete site determinations that were based on appropriate investigation and analysis at operational installations increased by 229 sites over FY96.

In FY97, the Navy obligated \$160.7 million in Environmental Restoration funds to BRAC installations. The planned funding levels for FY98 and FY99 are \$217.9 million and \$179.6 million, respectively. Of the 998 sites at Navy BRAC installations, 403 are Response Complete. Investigation or cleanup actions are in progress at the 595 remaining sites. In FY97, the Navy completed 189 Interim Actions at BRAC installations, bringing the total number of Interim Actions completed at BRAC installations to 354 at 258 sites. During FY97, the number of BRAC installation sites brought to Response Complete status through cleanup activities increased by 102 over FY96. The number of no-further-action or Response Complete site determinations that were based on appropriate investigation and analysis increased by 117 sites over FY96.

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